

## PATENT COOPERATION TREATY

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## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Rec'd PCT/PTO 04 DEC 2004



Applicant's or agent's file reference SMR/P550620PC	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/GB 03/02551	International filing date (day/month/year) 13.06.2003	Priority date (day/month/year) 13.06.2002
International Patent Classification (IPC) or both national classification and IPC D06N7/00		
Applicant MILLIKEN INDUSTRIALS LIMITED et al.		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 5 sheets, including this cover sheet.  
  
☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of    sheets.

- This report contains indications relating to the following items:

- |      |                                     |  |
|------|-------------------------------------|--|
| I    | <input checked="" type="checkbox"/> | Basis of the opinion   |
| II   | <input type="checkbox"/>            | Priority   |
| III  | <input type="checkbox"/>            | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability   |
| IV   | <input type="checkbox"/>            | Lack of unity of invention   |
| V    | <input checked="" type="checkbox"/> | Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| VI   | <input type="checkbox"/>            | Certain documents cited  |
| VII  | <input type="checkbox"/>            | Certain defects in the international application   |
| VIII | <input type="checkbox"/>            | Certain observations on the international application  |

Date of submission of the demand  09.01.2004	Date of completion of this report  27.09.2004
Name and mailing address of the International preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer  Pamies Olle, S  Telephone No. +49 89 2399-6055  

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/GB 03/02551

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-10 as originally filed

**Claims, Numbers**

1-28 received on 27.07.2004 with letter of 27.07.2004

**Drawings, Sheets**

1/4-4/4 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/GB 03/02551**

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-28
	No: Claims	
Inventive step (IS)	Yes: Claims	1-28
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-28
	No: Claims	

2. Citations and explanations

**see separate sheet**

**1. Novelty**

D1 discloses a floor covering, which can be in the form of a tile comprising a textile surface and an elastomer backing including elastomer granules (crumbs) and binder. Voids are present between the elastomer granules (see claims 1-3 and page 7, last paragraph).

D2 relates to a floor covering (also as a tile) having a textile surface layer and a backing comprising rubber particles (crumbs) and a binder. This backing has also voids (see claims 1-3, 5 and 9; page 5, lines 1-16; page 5, lines 55-61; figure 5; page 5, line 122 - page 6, line 8).

D3 refers to a rug underlay comprising a textile surface and a backing of rubber particles and a binder. Voids are also present in the backing (see claims 1 and 6; figure 3; example 2).

D4 discloses a carpet tile having a textile surface layer and a backing comprising rubber chips and a PU binder. This backing has voids (see abstract).

D5 relates to an artificial lawn of definite size comprising a textile surface layer and a backing composed of rubber chips and a PU binder. Gaps are present in the backing between the bonded chips (see abstract).

US-A-5170526 (hereinafter D6) relates to a mat having a pile fibre upper surface and a solid rubber or rubber-like backing, which extends beyond the periphery of the textile surface forming a border portion around the whole mat (see figures and column 1, lines 46-54).

These documents however do not disclose a mat as claimed. Therefore claims 1-28 are novel and meet the requirements of Article 33(2) PCT.

**2. Inventive Step**

- 2.1 D6 is regarded as being the closest prior art to the subject-matter of claim 1. The subject-matter of claim 1 therefore differs from this known D6 in that the backing employed includes elastomer crumbs, binder and voids between the crumbs and has a density of 0.5 - 0.9 g/cm<sup>3</sup>.

- 2.2 The problem addressed by the present application is to provide a mat produced at low cost and having good tear resistance, and therefore providing an unsupported rubber crumb border which is able to withstand the stresses experienced during normal usage.

The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) because there are no indications in D6 that would suggest to replace the backing therein employed by the crumb backing now claimed to solve the problem posed.

- 2.3 Claims 2-28 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.
3. Present claims 1-28 comply with the requirements of Article 33(4) PCT (Industrial applicability).